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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/810,748

03/26/2004

Iu-Meng Tom Ho

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11/02/2005

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EXAMINER

TRAN, THIEN F


ART UNIT

PAPER NUMBER

2811

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/810,748	<b>Applicant(s)</b> HO, IU-MENG TOM 	
	<b>Examiner</b> Thien F. Tran	<b>Art Unit</b> 2811	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.  
 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 21-69 is/are pending in the application.  
     4a) Of the above claim(s) 21-49, 56-59 and 64-69 is/are withdrawn from consideration.  
 5) ☒ Claim(s) 53-55 and 60-63 is/are allowed.  
 6) ☒ Claim(s) 50-52 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 50 is rejected under 35 U.S.C. 102(b) as being anticipated by Crafts (USPN 5,288,949).

Crafts discloses a method of designing an integrated circuit (IC), said method comprising:

creating a representation of a shielding mesh in at least one layer (top layer 12) of said IC, said shielding mesh having a first plurality of lines (stippled shading in Fig. 5) which are designed to provide a first reference voltage Vdd and having a second plurality of lines (solid shading in Fig. 4) which are designed to provide a second reference voltage Vss; creating a representation of a plurality of signal lines (unshaded 53, 56) routed through said shielding mesh, wherein said shielding mesh in the top layer 12 is gridless because the shielding mesh composed of the Vss lines and the Vdd lines in the top layer 12 are all extending in Y direction (see Figures 4-6).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

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the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 51 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crafts (USPN 5,288,949).

Crafts does not specifically disclose the method performed by an electronic design automation (EDA) tool that uses code written in an HDL. However, EDA tool that uses code written in an HDL is a well-known method in the art to design integrated circuits. Therefore, designing the integrated circuit of Crafts using known EDA tool employing code written in an HDL would have been obvious modification.

#### ***Allowable Subject Matter***

Claims 53-55 and 60-63 are allowed.

#### ***Response to Arguments***

Applicant's arguments filed 08/18/2005 have been fully considered but they are not persuasive. In response to applicant's argument that the power traces of Crafts are not gridless, the examiner respectfully disagrees with the remark. The power traces of Crafts in top layer 12 extend in the same Y direction, they do not cross one another in the same plane to form a perfect square grid as alleged by applicant. It is also observed that in the separate bottom layer 9, the power traces all extend in the same X direction; therefore, they do not cross one another to form a perfect square grid as alleged by applicant. It is clear that the claimed structure as shown by Figures 3-7 in the application is not patentable distinguished from the prior art structure. Applicant also argues that the traces of Crafts are in a carrier (MCM) and not in layers of an integrated circuit. It is noted that MCM is recognized as an integrated circuit module in

the art, wherein the traces are formed in at least one layer of the MCM integrated circuit module.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thien F. Tran whose telephone number is (571) 272-1665. The examiner can normally be reached on 8:30AM - 5:00PM Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on (571) 272-1732. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt  
October 28, 2005

  
**THIEN TRAN**  
**PRIMARY EXAMINER**